

Title (en)
CONTACT IMAGE SENSOR ARRAY

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Application
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Abstract (en)
[origin: EP0246481A1] The invention relates to a contact image sensor array comprising a row of opto-electrical image sensor cells (7, 10), a number of which is in each case combined located along a straight line at equal distance from one another on a sensor array segment (5), a number of sensor array segments (5) forming the contact image sensor array and each sensor array segment (5) comprising a monocrystalline silicon substrate (11) on which the image sensor cells (7, 10) and a selecting and signal processing circuit for these are formed as integrated circuit. The image sensor cells (7, 10) are formed by using a-Si:H and the mutually adjacent image sensor cells (10) at the extreme ends of the sensor array segments (5) extend in each case to the boundary edge (9), extending transversely to the row of image sensor cells (7, 10), of the respective silicon substrate (11), apart from a measure which, at the most, corresponds to one and a half times the distance between two mutually adjacent image sensor cells of one sensor array segment, the sensor array segments (5) of the contact image sensor array forming a linear abutting arrangement in such a manner that the image sensor cells (7, 10) of all sensor array segments (5) are located along one straight line and the distance of the edges (8) facing away from one another of the mutually adjacent image sensor cells (10) at the extreme ends of two sensor array segments (5) corresponds to the sum of twice the width of the remaining image sensor cells (7) and of the distance between two mutually adjacent image sensor cells (7, 10) of a sensor array segment (5). <IMAGE>

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